

## CATEGORY K

### ALERTNESS OR SLEEP DISORDERS

1. A variety of conditions cause fatigue or sleepiness and may adversely affect attentiveness, concentration and alertness. Consequently, some people with these conditions will have a significant increased risk of having a motor vehicle accident. Examples include primary sleep disorders such as obstructive sleep apnea syndrome and narcolepsy. Other causes include chronic insufficient sleep, shift work, medications, primary central nervous system disorders and psychiatric disturbances. A person may also be inattentive without having hypersomnia but most patients with significant excessive sleepiness are inattentive.
2. The assessment of a person's ability to remain fully attentive can be difficult and requires sensitivity and knowledge of the various conditions that may be present. Symptoms may be non-specific or obviously related to an already diagnosed condition. Some cases may require specialty evaluation by a sleep medicine specialist, neurologist, etc. A few simple questions can usually detect if a person has fatigue or hypersomnia. The Epworth Sleepiness Scale (ESS) has been validated as a reliable method to estimate the presence of excessive sleepiness. Values greater than 10 usually indicate the presence of abnormal sleep tendency but do not identify a specific cause.
3. The ultimate decision to recommend any specific limitations of driving privileges should be determined by the physician's best judgment based upon effectiveness of treatment and adherence to treatment. If the patient is unwilling or unable to use treatment, or if efficacy is in question, there are some tests available in certain facilities which can serve as a guide to a person's attentiveness which may predict an individual's driving risk. The ESS is used only as a guideline to approximate a person's degree of sleep tendency. If the ESS score is >10, further evaluation is probably warranted and the patient should be advised. Scores of >15 clearly indicate serious symptoms and driving should be discouraged until further medical assessment and therapy can be provided.

4. Instructions for use of the Epworth Sleepiness Scale (ESS) and the relative values for scoring are to be found on the following page, which may be copied for office use.
5. There are multiple guidelines published to help determine which drivers should be screened and qualified to drive commercial motor vehicles when they are at risk of, or diagnosed with obstructive sleep apnea. The presence of sleep apnea risk factors and related health consequences including: sleepiness while driving, motor vehicle accidents, treatment adherence and efficacy, all play important roles. A joint task force from Occupational Medicine and Sleep Medicine and the Federal Motor Carrier Safety Administration are the most prominent sources of information. These resources are in the public domain and can be accessed on the web. (Please see references.)

Johns, MW. 1991. A new method for measuring daytime sleepiness: the Epworth sleepiness scale. *Sleep* 14:540-545.

Findley, LJ, et al. 1995. Vigilance and automobile accidents in patients with sleep apnea or narcolepsy. *Chest* 108:619-624.

Aldrich, M. 1989. Automobile accidents in patients with sleep disorders. *Sleep* 12:487-494.

American Thoracic Society. 1994. Sleep apnea, sleepiness and driving risk. *AmJ Respir Crit Care Med* 150:1463-1473.

Natalie Hartenbaum, Nancy Collop, Ilene M. Rosen, et.al. "Sleep Apnea and Commercial Motor Vehicle Operators: Statement from the Joint Task Force of the American College of Chest Physicians, the American College of Occupational and Environmental Medicine, and the National Sleep Foundation" *Chest* 2006; 130; 902-905.

FMCSA Medical Examiner Handbook.  
<http://nrcme.fmcsa.dot.gov/mehandbook/MEhandbook.aspx>

## EPWORTH SLEEPINESS SCALE (ESS)

**INSTRUCTIONS:** Rate the chance that you would doze off or fall asleep during different, routine, daytime situations. How likely are you to fall asleep in contrast to just feeling tired? Use the following scale to choose the most appropriate number for each situation. Then add the numbers for the total score.

**ESS Scale:**

- 0 = Would never doze
- 1 = Slight chance of dozing
- 2 = Moderate chance of dozing
- 3 = High chance of dozing

SITUATION	CHANCE OF DOZING (0-3)
Sitting and reading	
Watching television	
Sitting inactive in a public place, for example, a theater or meeting	
As a passenger in a car for an hour without a break	
Lying down to rest in the afternoon	
Sitting and talking to someone	
Sitting quietly after lunch	
In a car, while stopped in traffic	
TOTAL COUNT =	

## CATEGORY K: ALERTNESS OR SLEEP DISORDERS

### PRIVATE

Safety Assessment Level	CIRCUMSTANCES	Medical Report Required	Interval for Review <sup>a</sup>	License Class and Restrictions
1	No past history or problem with alertness, excessive daytime sleepiness in the past two (2) years. ESS score under 6	No	N/A	Private vehicles
2	Problems of alertness or excessive daytime sleepiness (ESS score from 7 to 9) with good response to self-management	Yes	2 years	Private vehicles
3	Mild-to-moderate problems of alertness or excessive daytime sleepiness (ESS score from 10 to 12) with good response to professional management	Yes	1 year	Private vehicles
4	Moderate problems of alertness or excessive daytime sleepiness (ESS score from 13 to 15) symptoms related to time of day	Yes	6 months	Private vehicles; recommended restriction of daylight only
5	Moderate problems of alertness or hypersomnia (ESS score from 13 to 15) with symptoms related to time and circumstances	Yes	6 months	Private vehicles; recommended restrictions of speed, area, and daylight only, to be determined by examiner
6	N/A	N/A	N/A	N/A
7	Severe inattentiveness, hypersomnia (ESS score greater than 15) or under evaluation.	Yes	6 months	Private vehicles; special restrictions as recommended by health care professional
8	Severe inattentiveness or hypersomnia (ESS score greater than 15). Therapy not tried or unsuccessful	Yes	N/A	No driving

<sup>a</sup> Or as recommended by health care professional, longer or shorter interval according to stability

## CATEGORY K: ALERTNESS OR SLEEP DISORDERS

### COMMERCIAL

Safety Assessment Level	CIRCUMSTANCES	Medical Report Required	Interval for Review	License Class and Restrictions
1	No past history or problem with alertness, excessive daytime sleepiness in the past two (2) years. ESS score under 6	N/A	N/A	Commercial unlimited
2	Problems of alertness or excessive daytime sleepiness (ESS score from 7 to 9) with good response to self-management	N/A	N/A	Commercial unlimited
3	Mild-to-moderate problems of alertness or excessive daytime sleepiness (ESS score less than 11) with good response to professional management	Yes	1 year <sup>a</sup>	Must meet federal guidelines for OSA
4	Moderate problems of alertness or excessive daytime sleepiness (ESS score from 13 to 15) symptoms partly related to time of day	N/A	N/A	No commercial driving
5	Moderate problems of alertness or hypersomnia (ESS score from 13 to 15)	N/A	N/A	No commercial driving
6	N/A	N/A	N/A	N/A
7	Under evaluation	Yes	6 months	As recommended by health care professional
8	Severe inattentive or hypersomnia (ESS score greater than 15). Therapy not tried or unsuccessful	Yes	N/A	No driving

<sup>a</sup> Or as recommended by health care professional, longer or shorter interval according to stability